

Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims

Claim 1 (currently amended): A maxillofacial anchoring and distraction system comprising

an anchoring screw body having upper and lower sides and having a longitudinal axis and having a longitudinally extending threaded bore extending through the anchoring screw body from the upper side to the lower side, the anchoring screw body having an external bore screw thread,

an elongated generally cylindrical member having head and distal ends and a longitudinal axis, an externally threaded portion for threaded engagement in the threaded bore of the anchoring screw body, the generally cylindrical member being capable of being inserted in the bore of the anchoring screw body with the distal end inserted from the upper side and so that the distal end can extend out of the threaded bore beyond the lower side of the anchoring screw body with the generally cylindrical member being removable through the upper side upon completion of distraction, the head end including a driving surface, and the distal end having a distraction force transferring surface a ~~selected diameter~~, and

a reaction element having a flat surface portion for engagement with the distraction force transferring surface of the distal end of the generally cylindrical member when the cylindrical member is in threaded engagement with the anchoring screw body, the flat surface portion ~~extending along a selected axis a distance at least as great as the diameter of the distal end of the elongated generally cylindrical member to serve~~ serving as an engagement surface to distract against when the reaction element is placed in a horizontally extending osteotomy in a bone with the flat surface portion of the reaction element generally perpendicular relative to the longitudinal axis of the anchoring screw body and the elongated generally cylindrical member, the reaction element comprising a

relatively wide mesh body having a plurality of holes formed therethrough and a narrow, relative to the mesh body, solid tip portion extending from the body, the tip portion provided with the flat surface portion.

Claim 2 (withdrawn): A maxillofacial anchoring and distraction system according to claim 1 in which the reaction element comprises a bone screw having a generally cylindrical body portion with a longitudinal axis and having an external screw thread, the generally cylindrical body being formed with the flat surface portion recessed below the threads and with the selected axis extending parallel with the horizontal longitudinal axis.

Claim 3 (canceled)

Claim 4 (previously presented): A maxillofacial anchoring and distraction system according to claim 1 in which the holes comprise both generally circular holes and elongated holes.

Claim 5 (previously presented): A maxillofacial anchoring and distraction system according to claim 1 in which a weakened portion is formed between the tip portion and the body.

Claim 6 (currently amended): A maxillofacial anchoring and distraction system according to claim 5 in which the weakened portion is formed by opposing slots formed between the tip portion and the body.

Claim 7 (currently amended): A maxillofacial anchoring and distraction system comprising

an anchoring screw body having an upper side and a lower side and having a longitudinal axis and having a longitudinally extending threaded bore extending through the anchoring screw body from the upper side to the lower side, the anchoring screw body having an external bone screw thread,

an elongated generally cylindrical member having head and distal ends and a longitudinal axis, an externally threaded portion for threaded engagement in the threaded bore of the anchoring screw body, the generally cylindrical member being capable of being inserted in the bore of the anchoring screw body with the distal end inserted from the upper side and the distal end configured so that it can extend out of the threaded bore beyond the lower side of the anchoring screw body and formed with a distraction force transferring surface, the head end including a driving surface, and the distal end having a selected diameter, and

a reaction element having a mesh fixation base plate having a plurality of holes formed therethrough and formed with a solid flat surface portion for engagement with the distraction force transferring surface of the distal end of the generally cylindrical member when the cylindrical member is in threaded engagement with the anchoring screw body, the flat surface portion extending along a selected axis a distance greater than the diameter of the distal end of the elongated generally cylindrical member to facilitate lateral alignment of the flat surface portion with the end surface of the distal end, the flat surface portion to serve as an engagement surface to distract against when the flat surface portion of the reaction element is placed in a horizontally extending osteotomy in a bone with the flat surface portion of the reaction element generally perpendicular relative to the longitudinal axis of the anchoring screw body and the elongated cylindrical member.

Claim 8 (original): A maxillofacial anchoring and distraction system according to claim 1 in which the flat surface portion extends approximately twice the diameter of the distal end of the elongated generally cylindrical member.

Claim 9 (withdrawn) A maxillofacial anchoring and distraction system according to claim 2 in which the bone screw has a head formed with an indexing surface portion to reflect the angular position of the recessed flat surface portion.

Claim 10 (withdrawn): A maxillofacial anchoring and distraction system according to claim 9 in which the head has a generally circular outer periphery formed with a flat

surface portion in the outer periphery at an angular position matching that of the angular position of the flat surface portion in the body.

Claim 11 (withdrawn): A maxillofacial anchoring and distraction system according to claim 2 in which the head is formed with a recessed polygonal driving feature.

Claim 12 (withdrawn): A maxillofacial anchoring and distraction system comprising
a generally cylindrical base plug having a longitudinal axis, a crestal end and having a closed ended, threaded bore formed through the crestal end and extending along the longitudinal axis,

an anchoring screw body having a longitudinal axis and having a head end and a distal end and having a longitudinally extending bore extending through the anchoring screw body, the bore being threaded along at least a portion of its length and having a circumferentially extending sealing surface, the anchoring screw body having external threads,

an elongated generally cylindrical member having first and second ends, an externally threaded portion for threaded engagement in the threaded bore of the anchoring screw body, the second end having a diameter selected to be received within the bore of the base plug bypassing the threaded portion of the bore and the sealing surface of the screw body, and

a sealing screw having a distal free end and an external thread for threaded engagement in the threaded bore of the anchoring screw body after the generally cylindrical member has been removed upon completion of distraction, the sealing screw having a circumferentially extending sealing surface for engagement with the sealing surface of the anchoring screw body.

Claim 13 (withdrawn): A maxillofacial anchoring and distraction system according to claim 12 in which the sealing surface of the sealing screw is formed of a generally cylindrical surface and the sealing surface of the sealing anchoring screw body is formed of a generally cylindrical surface having a slight taper with the diameter increasing decreasing in a direction going toward the distal end.

Claim 14 (withdrawn): A maxillofacial anchoring and distraction system according to claim 12 in which the head end is formed with a polygonal driving surface.